

## XP-002263230

AN - 2002-167064 [22]

AP - JP20000086271 20000327

CPY - KAWA-N

DC - A17 A96 P33 P34

FS-- CPI;GMPI

IC - A61J1/14 ; A61L29/00 ; A61M5/14

MC - A04-E02E A04-F05 A04-G02E3 A04-G06 A05-G01E A10-E04A A12-V03D

PA - (KAWA-N) KAWASUMI LAB INC

PN - JP2001269403 A 20011002 DW200222 A61M5/14 006pp

PR - JP20000086271 20000327

XA - C2002-051620

XIC - A61J-001/14 ; A61L-029/00 ; A61M-005/14

XP - N2002-127788

AB - JP2001269403 NOVELTY - A medical tube is composed of at least three layers comprising an outer layer with soft and anti-kink properties made of polyvinyl chloride or polyurethane copolymer; an intermediate mainly made of chlorinated polyethylene or maleic acid copolymer; and an inner layer made of polyethylene or a copolymer of polyethylene and alpha -olefin.

- DETAILED DESCRIPTION - A medical tube composed of at least three layers including:

- (1) an outer layer (2) with soft and anti-kink properties at ratios of 50-90 % to the total thickness, particularly made of soft polyvinyl chloride or a polyurethane copolymer;
  - (2) an intermediate layer (3) with favorable adhesive property, particularly mainly made of chlorinated polyethylene or a maleic acid copolymer, and
  - (3) an inner layer (4) without absorbing medicine(s) and inhibiting dissolution of a plasticizer within the tube, particularly polyethylene or a copolymer of polyethylene and alpha -olefin.
- USE - As a medical, particularly a surgical tube.
- ADVANTAGE - The tube has advantageous properties such as (1) anti-kink, (2) solvent welding, (3) no dissolution of solvent, (4) no adsorption of drug, e.g. nitroglycerin, and (5) adhesion between layers.

- (Dwg.1/2)

IW - MEDICAL TUBE

IKW - MEDICAL TUBE

NC - 001

OPD - 2000-03-27

ORD - 2001-10-02

PAW - (KAWA-N) KAWASUMI LAB INC

TI - Medical tube

A01 - [001] 018 ; R00338 G0544 G0022 D01 D12 D10 D51 D53 D58 D69 D82 CI 7A ; H0000 ; S9999 S1661 ; P1796 P1809

- [002] 018 ; ND01 ; Q9999 Q8731 Q8719 ; Q9999 Q8026 Q7987 ; Q9999 Q7818-R ; K9701 K9676 ; K9574 K9483 ; B9999 B5243-R B4740 ; K9416

- [003] 018 ; B9999 B3827 B3747

- [004] 018 ; A999 A384

A02 - [001] 018 ; R00326 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53 D58 D82 ; H0000 ; M9999 M2244 M2222 ; S9999 S1661 ; P1150 ; P1161 ; P1229